

REMARKS

In an Office Action mailed on June 3, 2003, claims 1, 2, 6-8, 27, 28, 31 and 32 were rejected 35 U.S.C. § 102(b) as being anticipated by Ownby; claims 9, 10, 33, 34, 47 and 48 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Baird in view of Edwards; claims 13, 14, 20, 21, 35, 36, 49 and 50 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Baird in view of King; claims 41, 42 and 44-47 were rejected under 35 U.S.C. § 102(b) as being anticipated by Price; claims 17-19, 23-26, 37-40 and 51-54 were allowed; and claims 5, 11, 12, 15, 16, 22 and 43 were objected to as being dependent upon rejected base claims but allowable if rewritten in independent form.

The specification has been amended to include language that is supported by the disclosure contained in originally-filed claim 13. Therefore, this specification amendment does not constitute new matter. Claim 1 has been amended to incorporate the limitations of dependent claim 5, thereby effectively rewriting claim 5 in independent form. It is therefore assumed that amended claim 1 is allowable, as indicated by the Examiner's statement that claim 5 is allowable if rewritten in independent form. Claims 2 and 6-8 overcome the § 102 rejections for at least the reason that these claims depend from an allowable claim. The §§ 102 and 103 rejections of the remaining claims are discussed below in the corresponding sections.

Rejections of Claims 9 and 10:

The apparatus of independent claim 9 includes a magnet that is formed from a material that has magnetic properties similar to SmCo-30.

The Examiner combines Baird with Edwards to derive the § 103(a) rejection of independent claim 9. However, a *prima facie* case of obviousness requires more than just showing the elements of a claim in various references. In this manner, a *prima facie* case of obviousness requires the Examiner to show where the prior art contains the alleged suggestion or motivation for the combination of Baird and Edwards. Furthermore, the Examiner must use specific citations to a prior art reference to show the alleged suggestion or motivation. See *Ex parte Gambogi*, 62 USPQ2d 1209, 1212 (Bd. Pat. App. & Int. 2001); *In re Rijckaert*, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993); M.P.E.P. § 2143. Thus, for at least the reason that the

Examiner fails to show where the prior art contains the alleged suggestion or motivation to combine Baird and Edwards so that the permanent magnet of Baird is replaced by a material that has magnetic properties similar to SmCo-30, a *prima facie* case of obviousness has not been established for independent claim 9.

Claim 10 is patentable for at least the reason that this claim depends from an allowable claim.

Rejections of Claims 13, 14, 20, 21, 35, 36, 49 and 50:

The apparatus of independent claim 13 includes a winding that has at least approximately 1000 turns, and the apparatus of independent claim 20 includes a winding that has at least approximately 40,000 turns. The method of independent claims 35 and 49 includes using a winding that has at least approximately 40,000 turns. Claim 49 also recites using the winding to generate a signal that indicates sudden transverse movement.

The Examiner rejects independent claims 13, 20, 35 and 49 under 35 U.S.C. § 103(a) in view of the combination of Baird and King. However, the Examiner fails to show where the prior art contains the alleged suggestion or motivation for this combination, as a *prima facie* case of obviousness requires more than just a piecewise combination of elements from various prior art references. Therefore, for at least the reason that the Examiner fails to specifically show where the prior art contains the alleged suggestion or motivation for the combination of Baird and King, withdrawal of the § 103(a) rejections of independent claims 13 and 20 is requested. *See Ex parte Gambogi*, 62 USPQ2d 1209, 1212 (Bd. Pat. App. & Int. 2001); *In re Rijckaert*, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993); M.P.E.P. § 2143.

A *prima facie* case of obviousness for independent claim 49 has not been established for at least the additional, independent reason that neither Baird nor King teaches or suggests using a winding to indicate a sudden transverse movement. Claims 14, 21, 36 and 50 are patentable for at least the reason that these claims depend from an allowable claim.

Rejections of Claims 41, 42 and 44-46:

The method of claim 41 includes sensing a strength of a magnetic field that at least partially extends through a portion of a downhole pipe and based on the sensed strength, generating a signal that is indicative of sudden transverse movement.

In contrast to the limitations of independent 41, Price is directed to using measurements from a casing joint detector 11 to detect casing joints and then computing errors in the measurements. Price teaches errors that may be computed either by a technique that involves using a casing tally, a record of casing lengths that are measured before the casings were set in the borehole, or by using the measurements between known anomaly locations in the well casing. However, Price neither teaches nor suggests generating a signal indicative of sudden transverse movement and thus, neither teaches nor suggests based on a sensed strength of a magnetic field, generating a signal that is indicative of sudden transverse movement. Applicant requests the Examiner to specifically point out the language (of Price) that the Examiner contends provides this teaching. Otherwise, withdrawal of the § 102 rejection of independent claim 41 in view of Price is requested.

Claims 42 and 44-46 are patentable for at least the reason that these claims depend from an allowable claim.

Rejections of Claims 47 and 48:

The method of claim 47 includes sensing a change in strength of a flux field to indicate sudden transverse movement.

The Examiner rejects independent claim 47 under 35 U.S.C. § 102(b) as being anticipated by Price. See discussion of the rejection of independent claim 41 above. In particular, Price neither teaches nor suggests indicating a sudden transverse movement, as Price is directed to error detection techniques. Therefore, Applicant requests the Examiner to specifically point out where Price teaches the alleged sensing act of claim 47. Otherwise, withdrawal of the § 102(b) rejection of claim 47 is requested.

The Examiner also rejects independent claim 47 under 35 U.S.C. § 103(a) as being unpatentable over Baird in view of Edwards. However, neither Baird nor Edwards teaches or suggests sensing a change in a strength of a flux field to indicate sudden transverse movement.

Thus, for at least this reason, a *prima facie* case of obviousness has not been established for independent claim 47.

A *prima facie* case of obviousness has not been established for independent claim 47 for the additional, independent reason that the Examiner fails to show where the prior art contains the alleged suggestion or motivation to combine Edwards and Baird. In this manner, the Examiner must show, with specific citations to a prior art reference, where the prior art contains the alleged suggestion or motivation. *See Ex parte Gambogi*, 62 USPQ2d 1209, 1212 (Bd. Pat. App. & Int. 2001); *In re Rijckaert*, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993); M.P.E.P. § 2143.

Claim 48 is patentable for at least the reason that this claim depends from an allowable claim.

**Rejections of Claims 49 and 50:**

The method of independent claim 49 includes using a winding to generate a signal that is produced by a change and a strength of a flux field to indicate sudden transverse movement. Claim 49 recites that the winding has at least approximately 40,000 turns.

The Examiner rejects independent claim 49 under 35 U.S.C. § 103(a) as being unpatentable over Baird in view of King. Although King teaches a winding having 40,000 turns, the Examiner fails to show where the prior art contains the alleged suggestion or motivation to combine Baird and King. Without such a specific showing, a *prima facie* case of obviousness has not been established for independent claim 49.

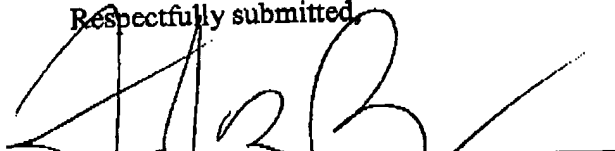
A *prima facie* case of obviousness has not been set forth for independent claim 49 for at least the additional, independent reason that neither Baird nor King teaches or suggests using a winding to generate a signal that is produced by change in a strength of a flux field to indicate sudden transverse movement.

Claim 50 is patentable for at least the reason that this claim depends from an allowable claim.

CONCLUSION

In view of the foregoing, withdrawal of the §§ 102 and 103 rejections and a favorable action in the form of a Notice of Allowance are requested. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 20-1504 (22.1414).

Respectfully submitted,



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